

ABSTRACT OF THE INVENTION

The present invention comprises a process for filtering a slurry and a filter cartridge construction for filtering a slurry having a filtration medium formed of a depth filter such as a cylindrical seamless fibrous depth filter comprising a nonwoven fibrous mass, woven fibers, a plurality of nonwoven fibrous layers or a fibrous felt or the like or a wound depth filter retained within a housing substantially free of an open void volume upstream of the depth filter which causes separation of solid particles from a slurry being filtered. The filtration medium is divided into a plurality of depth filter segments by spacers which are spaced apart from each other along the length of a filter cartridge housing which houses the depth filter. The spacers serve to divide the depth filter medium into depth filter segments and to allow fluid to pass there through along a defined path defined by the configuration of the open portions of the spacers. In addition the spacers are configured to seal the inner surfaces of the filter cartridge housing to prevent channelling of the slurry being filtered along the inner surfaces of the housing. By utilising the spacers, the compressibility of the filtration medium also is substantially reduced.